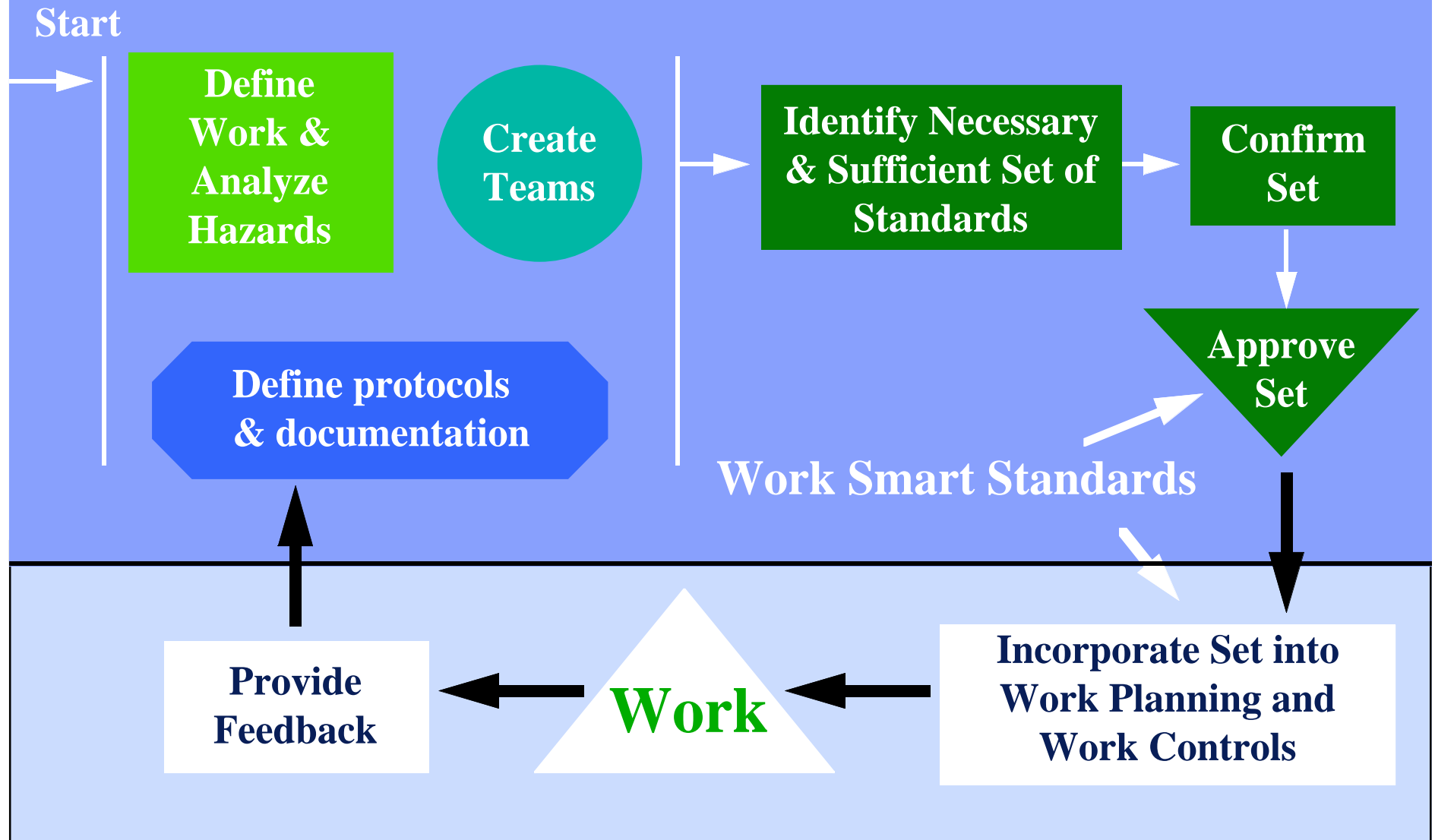

Selection of ES&H Work Smart Standards at Lawrence Livermore National Laboratory

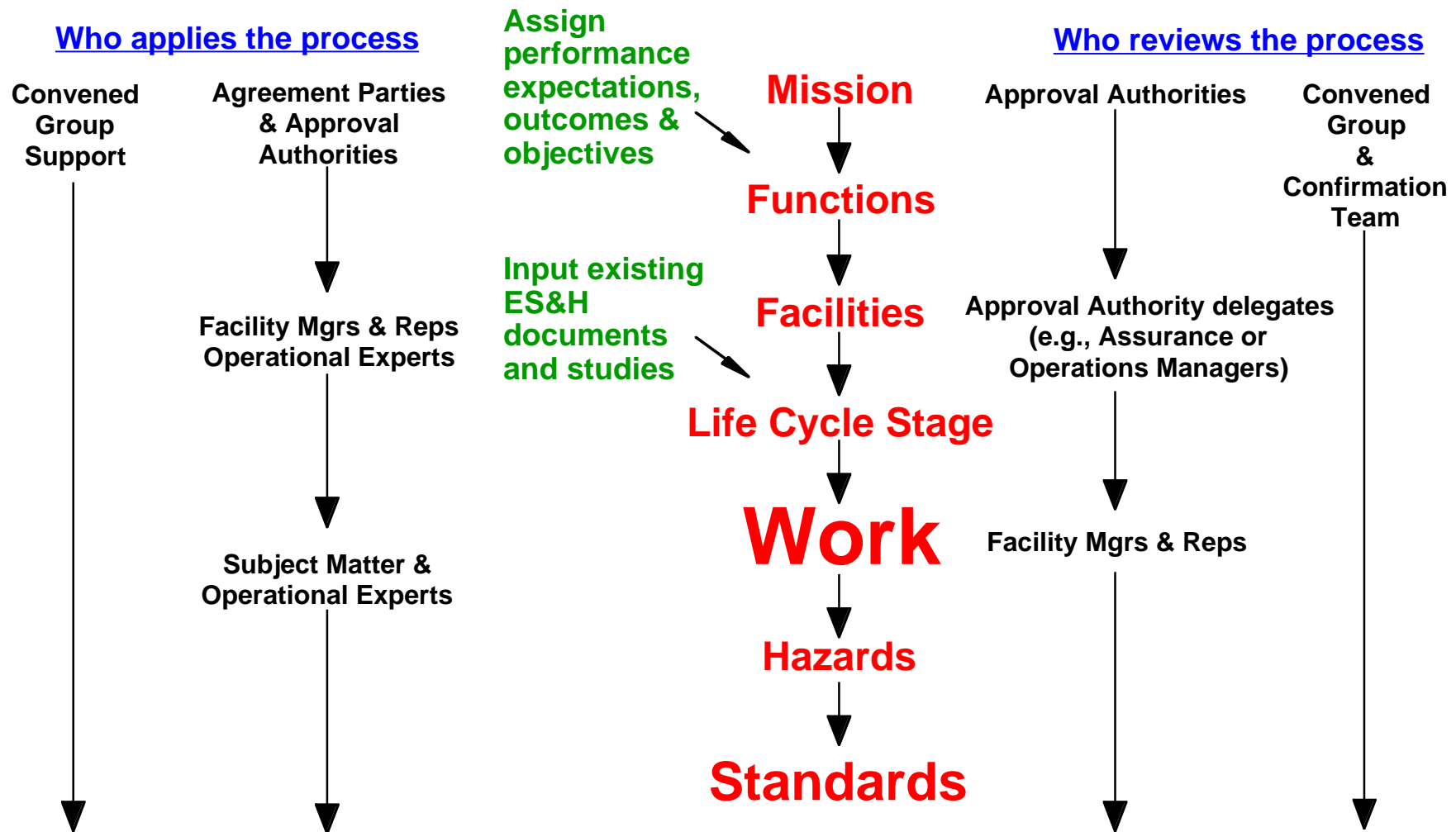


**Briefing for
Environmental, Safety & Health Working Group
Tuesday, October 29, 1996
by
Jack Sims**

Establishing Work Smart Standards



Basic model for site-wide application of the WSS selection process



Characteristics of the model



- **The critical elements of mission, work, risk assessment, customized standards, management, and the workers are all tied together.**
- **The scope, performance expectations, outcomes and objectives are established at the beginning by the Approval Parties and Authorities.**
- **The model puts the effort to analyze the work and select the standards with the facilities and the programs doing the work.**
- **The process uses the normal ES&H mechanisms familiar to facility and program personnel.**
- **The analysis of the work and the hazards will utilize existing documentation, as appropriate, to control costs and speed consensus.**

Characteristics of the model continued ...



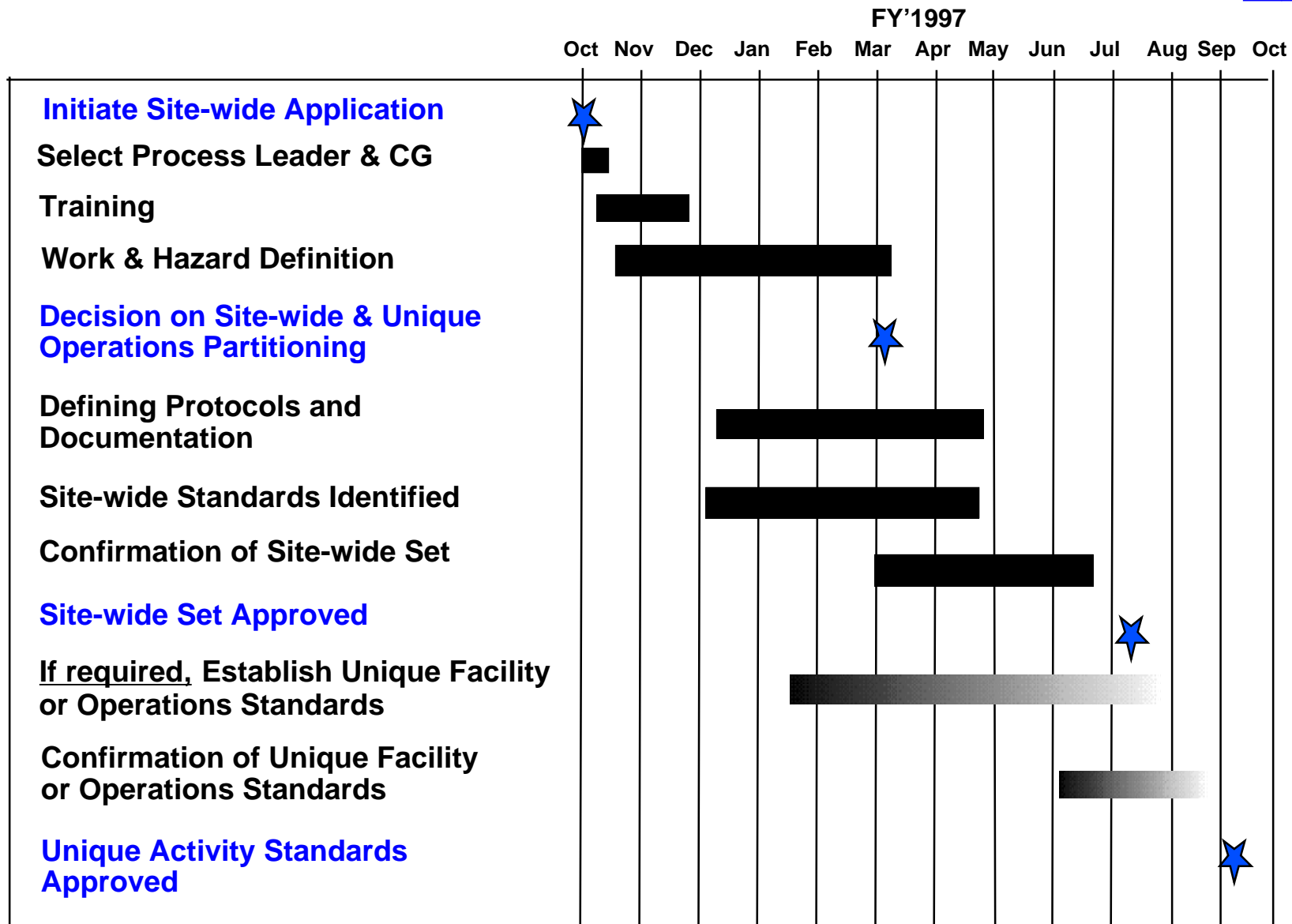
- **The model has its roots in two prior ES&H projects that were successful, the Storm Water Pollution Prevention Plan (SWPPP) and the Building Drain Repair (BDR).**
 - **the SWPPP used a committee to work with the facility managers and owners to develop best management practices. The committee, through the consensus process, developed consistent practices across the Lab.**
 - **The BDR obtained information about facilities through the use of questionnaires, support documents and training. The project depended heavily on the facility managers for the information.**
- **Plant Operations' ES&H organizations and Plant Engineering will have a large role in the analysis of the work.**

Characteristics of the model continued ...



- **Having the Assurance Managers (the ES&H WG) reviewing on the project will improve the quality of the set of standards selected.**
- **The Convened Group supports, facilitates and reviews all aspects of the process.**
- **The Approval Parties and Authorities will be kept informed on the process by the Convened Group, the Assurance Managers and the Facility Managers and Representatives providing a comprehensive communication system.**
- **Direction or guidance from the Approval Authorities will come into the process through the Convened Group.**

Completion of the application is dependent on the number and complexity of unique facilities or operations



Strategy for the selection of site-wide Work Smart Standards



- The WSS process is owned by DOE line management and the LLNL programs with support from the ES&H organizations
- Facility Managers & Representative, program, and discipline experts will perform the process
- The scope of the application will be all ES&H aspects of work at LLNL
- Based on a review of the work, it is expected that the great majority (if not all) of our work is not unique to LLNL and is similar to work in industry
- A set of standards will be selected that will be implemented to control the hazards associated with the work
- Standards will be selected for work found to be unique to LLNL
- Only one application of the WSS Closure Process should be necessary
- The set and its implementation will compliment our existing ES&H Management System

The cost is estimated to be \$2,350K



	<u>Cost</u>	<u>FTEs</u>
Total Burdened Effort	\$1,500K	8.0
Total G&A Effort	\$660K	6.0
Procurements/Supplies	\$190K	
TID	\$70K	
Travel/Confirmation Process	\$65K	
Supplies	\$12K	
Supplemental Labor	\$43K	
Total	\$2,350K	
Program cost	\$1,500K	
Institutional cost	\$850K	

The Project components will reflect the Closure Process Elements



Project Components

Initiation

Establishing Teams

Training

Work & Hazard Definition

Stakeholders

Communication

Protocols

Documentation

Standard Identification

Confirmation

Approval of WSS

Process Elements

(DOE M 450.3-1)

Chapter 1 Initiating The Process

Process Element 2

(Creating the Teams)

DOE N 450.3

Process Element 1

(Defining the Work and Hazards)

Process Element 1

Process Element 1

Process Element 3

(Establishing Protocols and Documentation)

Process Element 3

Process Element 4

(Identifying the Standards)

Process Element 5

(Confirming the Standards)

Process Element 6

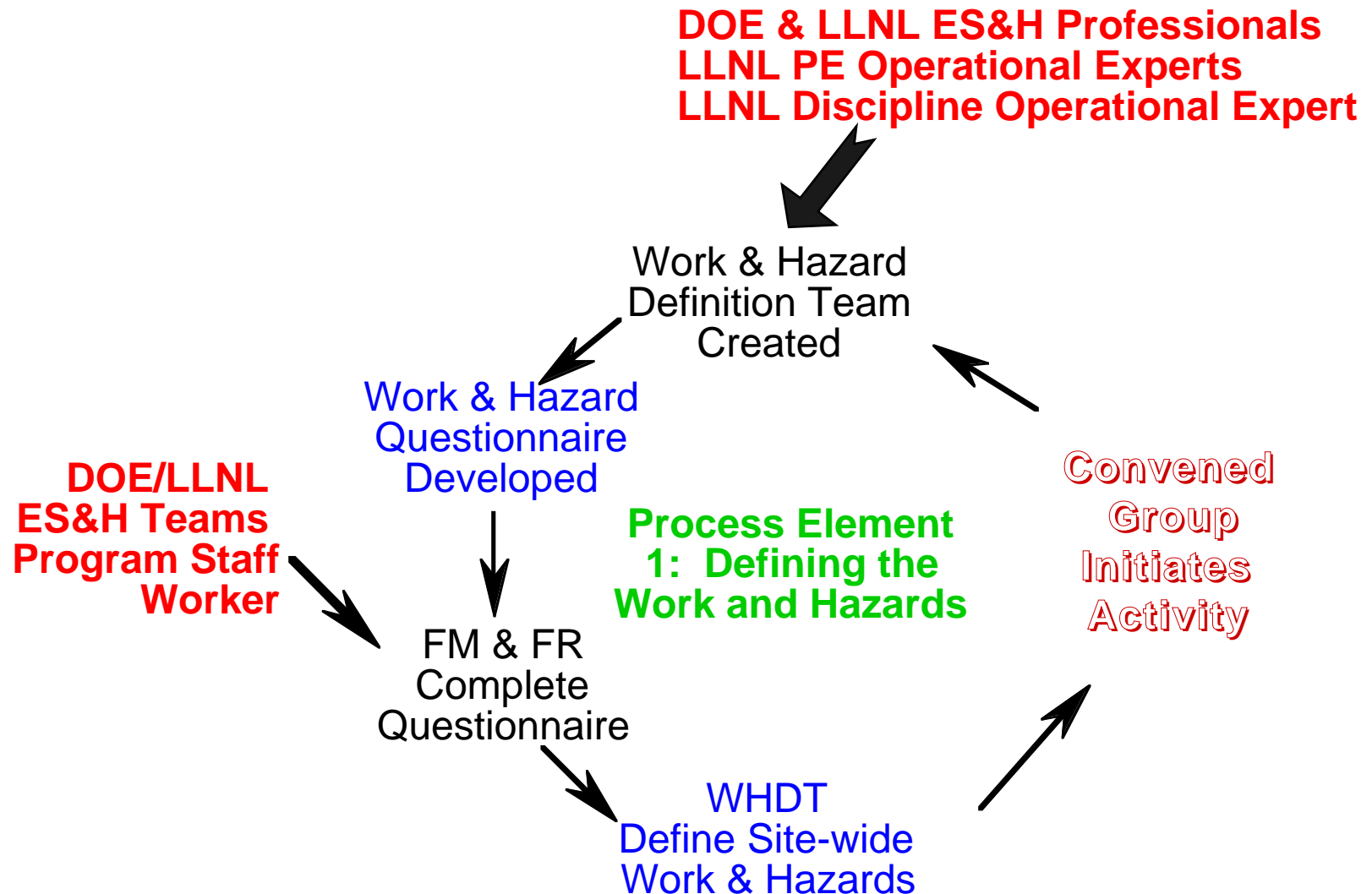
(Approving the Standards)

The initial Convened Group work is to get the process moving and create the infrastructure



Process Elements 1, 2 & 3	23w	8/9/96	5/12/97
<u>Activity</u>	<u>Duration</u>	<u>Start</u>	<u>Finish</u>
★ <i>Training on the Process</i>	<i>8w</i>	<i>11/18/96</i>	<i>1/10/97</i>
★ <i>Work & Hazard Definition Team</i>	<i>12w</i>	<i>1/97</i>	<i>3/97</i>
Contact Stakeholders	23w	12/96	5/97
Establish Communication	13w	10/96	1/97
Defining Protocols	6w	1/97	2/97
Establishing Documentation Requirements	14w	1/97	4/97

The Work & Hazard Definition Team will determine the initial conditions of the work and the hazards



The Facility Managers and the Facility Representatives will collect the information and complete the questionnaire



The LLNL Facility Managers and the DOE Facility Representatives will:

- **Be responsible for collecting the information**
- **Obtain support from the**
 - LLNL ES&H Team**
 - LLNL Program Staff**
 - LLNL Workers**
- **DOE Facility Representatives may call upon other DOE experts as needed**

The Work & Hazard Definition Team will determine the initial conditions of the work and the hazards



- **The Work & Hazard Definition Team will:**
 - **Develop the questionnaire**
 - **Solicit information on the work and its hazards**
 - **Analyze and summarize the information**
 - **Provide the information and defined work to the Convened Group**
- **The Team's level of effort will be high initially during January to develop the questionnaire.**
- **The Facility Managers, Facility Representatives and the experts level of effort will be high from late February through and into March.**
- **The Team's Level of Effort will increase from mid-February to the end of the task.**

The Work Smart Standards are selected during Process Element 4



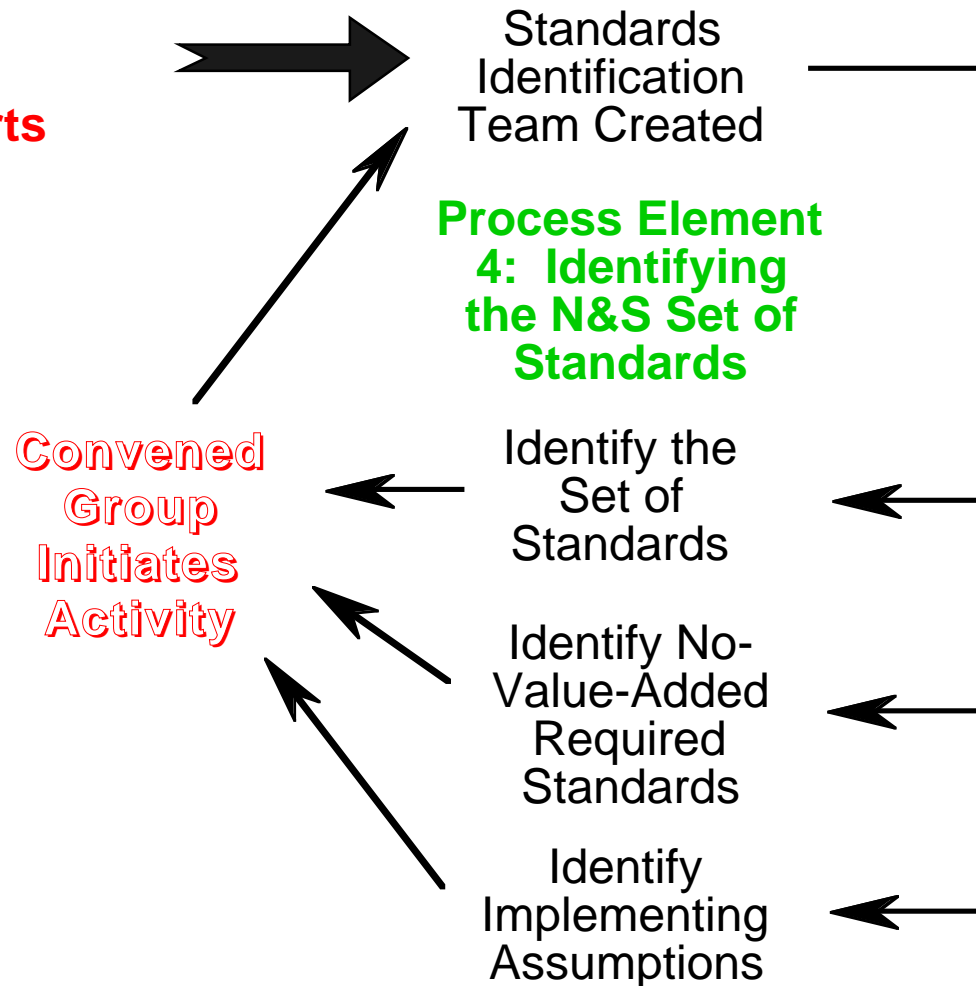
Process Element 4	9w	9/2/96	12/18/96
<u>Activity</u>	<u>Duration</u>	<u>Start</u>	<u>Finish</u>
Establish Identification Team	4w	2/97	3/97
★ <i>Identification Team</i>	14w	3/97	5/97
★ <i>Convened Group Review of WSS</i>	5w	6/97	7/97

- Standards will be selected as the definition of the work comes from the WHDT. Without this the schedule will slip.

The information will be used to select the standards during Process Element 4



**DOE & UC ES&H
Professionals
PE Workers & Staff
Subject Matter Experts**

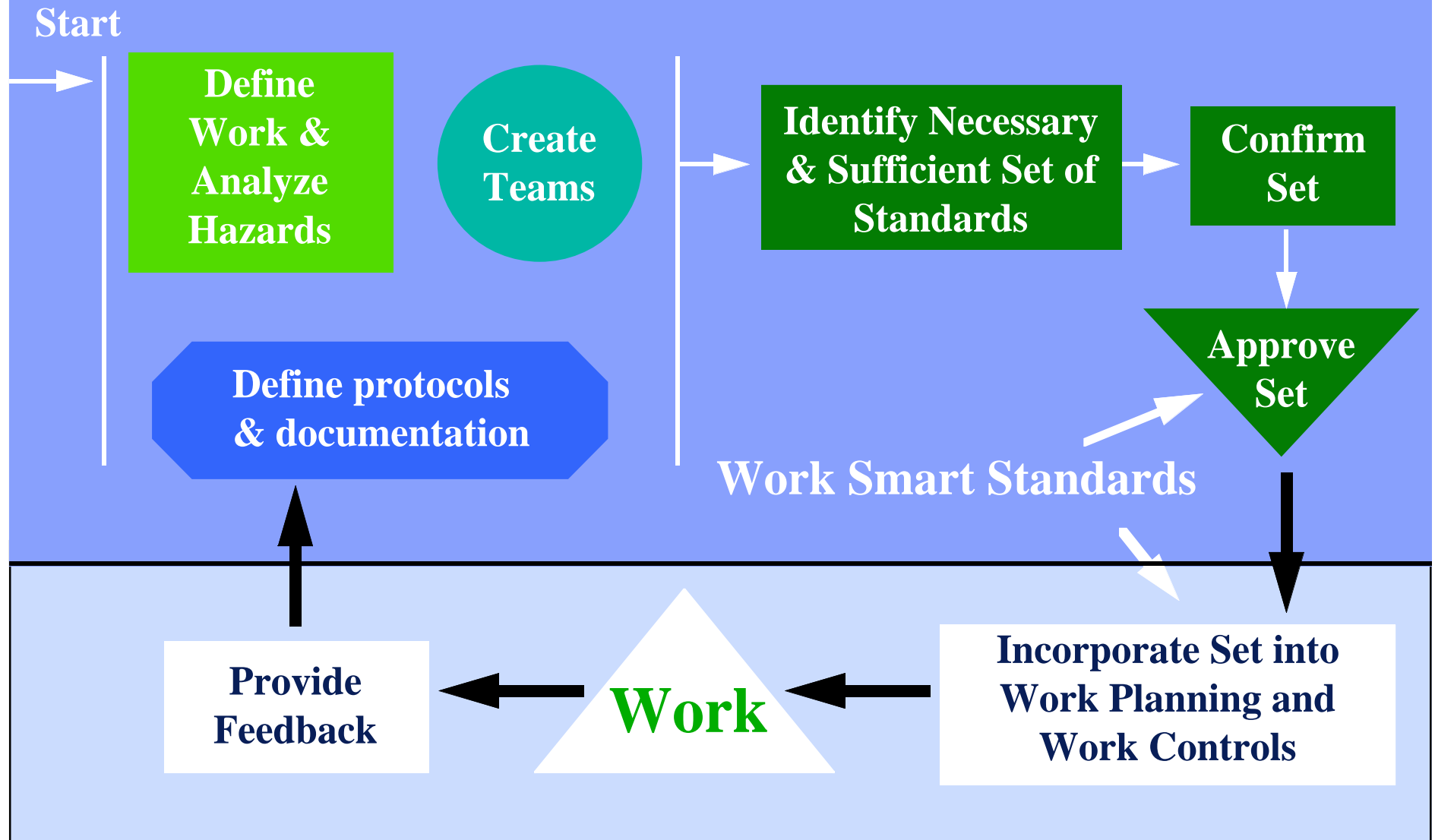


The Work Smart Standards are selected during Process Element 4 continued ...



- **DOE & LLNL Identification Team members will include**
 - health physicist
 - industrial hygienist
 - industrial safety specialist
 - other support as necessary, e.g., fire safety
- **Estimated time commitment is one half-day session per week with another half-day's individual work per week.**
- **Team will may subdivide by subject area.**
- **Each standard selected will be justified, implementing assumptions stated and no-value added requirements will be identified and documented**

Establishing Work Smart Standards



Careful selection of the participants will help ensure that the appropriate set of standards is chosen for a reasonable cost



- The Approval Authorities must give full support to the process and must have an open mind as to the benefits and appropriateness of the process for selecting standards for inclusion in the contract. They must empower their representatives to carry out the process faithfully.
- Process participants must be drawn from the best DOE and UC and possibly outside staff. Participants should have a strong technical understanding of the work and many years of experience.
- The Convened Group members must have the experience, the personality and the authority to work through the consensus process to help negotiate the set of standards. Continuous active involvement of each and every member of the Group is essential to its success.

Careful selection of the participants will help ensure that the appropriate set of standards is chosen for a reasonable cost Continued ...



- **Participants, especially on the Convened Group, must respect the skills and contributions of all participants and must abandon traditional roles, empower the participants, and improve teamwork between DOE and UC staff.**
- **Subject matter experts that will select the standards will be senior technical and operational staff members from DOE and LLNL who may call upon support organizations, such as, the LLNL ES&H Teams and the DOE ES&H Division and outside experts, as necessary .**

Careful selection of the participants will help ensure that the appropriate set of standards is chosen for a reasonable cost



Approval Authorities – Senior managers at LLNL, UC and the DOE. Recommend DD/Ops, DD/P, AD/PO, DOE/OAK Manager, DOE Site Manager, UC/OP

Convened Group – LLNL Project Manager, UC/OP, DOE Site Mgmt Office, DOE Env Mgmt, Chair ES&H WG, LLNL Program Rep, senior HP, senior IS/IH (senior tech staff from either DOE or LLNL)

Assurance Managers – LLNL AM, they understand ES&H and represent the programs

Careful selection of the participants will help ensure that the appropriate set of standards is chosen for a reasonable cost continued ...



Facility Managers – LLNL FM or Operations Managers, they understand the work, ES&H and represent the facilities and programs and resource authorities

Facility Representative – DOE FR, they understand the work, ES&H and represent DOE programs and resource authorities

Workers – LLNL or outside workers who know the work best and represent the programs.

Subject Matter Experts – LLNL program, HC, EPD, HC, FESSP, DOE ES&H Div, other outside personnel.

Some Roles and Responsibilities for the Application of the Work Smart Standards Selection Process



- **The Approval Authorities will provide clear direction on the scope including negotiation limitations and boundaries and expectations for the set of standards chosen**
- **The Convened Group represents the Approval Authorities and is empowered to make decisions**
- **The Convened Group will provide training and support to the various teams and others in carrying out the Work Smart standards selection process**
- **Work will be analyzed to the extent necessary to identify its hazards**

Some Roles and Responsibilities for the Application of the Work Smart Standards Selection Process continued...



- **The Convened Group should be limited to those necessary to fairly represent the Agreement Parties and to have sufficient expertise in ES&H matters. Ideal number would be 8 members**
- **The Convened Group will be responsible for briefings of the Approval Authorities**
- **Confirmation of the entire set of internal peer reviewers and external peer reviewers**

Potential key players



- **Approval Authorities - Jim Turner & Bruce Tarter**
- **Process Leader - from LLNL (1d/w)**
- **Project Manager - from LLNL (full time)**
- **Convened Group - 1d/w/person**
 - **DOE:**
 - **Senior program managers - DP & EM**
 - **Senior technical expert - HP, IH, Env, IS**
 - **UC:**
 - **UC/OP ES&H manager**
 - **LLNL:**
 - **ES&H Working Group Chair**
 - **Program representatives (1 or 2)**
 - **Senior technical expert - HP, IH, Env, IS**

There are critical elements to ensure success of the application



- **Active engagement by all participants is critical for success**
- **General acceptability (i.e., adequacy) of the set of Standards depends on the people involved - their knowledge, experience and credibility**